

23. An isolated polynucleotide encoding a polypeptide having phosphohydrolase activity, said polynucleotide comprising a nucleotide sequence that has at least about 90% sequence identity to SEQ ID NO: 5.

24. An isolated polynucleotide encoding a polypeptide having phosphohydrolase activity, wherein said polynucleotide hybridizes under highly stringent conditions to the complement of SEQ ID NO: 5.

25. The polynucleotide according to any one of claims 20, 21, 23 or 24 that comprises nucleotides 247-1530, 385-450, 613-660, 745-807 or 823-888 of SEQ ID NO:5.

26. The polynucleotide according to any one of claims 19-24 that is a DNA.

27. A vector comprising the polynucleotide of any one of claims 19-24.

28. A host cell comprising the vector of claim 27.

29. A host cell genetically engineered to contain a polynucleotide encoding the amino acid sequence of SEQ ID NO: 6 in operative association with a regulatory sequence that controls expression of the polynucleotide in the host cell.

30. A method of making a CD39L4 polypeptide comprising the steps of culturing the host cell of claim 28 in suitable culture medium and isolating the polypeptide from the cell or the culture medium.